



SEQUENCE LISTING

<110> Horvitz, H. Robert
Yuan, Junying
Shaham, Shai

<120> Cloning, Sequencing and Characterization
of Two Cell Death Genes and Uses Therefor

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<141> 2000-05-24

<150> US 08/287,669

<151> 1994-08-09

<150> US 07/979,638

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B4
Cmt

78

B


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 <212> PRT
 <213> Caenorhabditis elegans

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Lys Gln Val Leu Asn Ser Asp Asn Gly Asp Met Ile Asn Ser Cys Gly
 35          40          45
Thr Val Arg Glu Lys Arg Arg Glu Ile Val Lys Ala Val Gln Arg Arg
 50          55          60
Gly Asp Val Ala Phe Asp Ala Phe Tyr Asp Ala Leu Arg Ser Thr Gly
 65          70          75          80
His Glu Gly Leu Ala Glu Val Leu Glu Pro Leu Ala Arg Ser Val Asp
 85          90          95
Ser Asn Ala Val Glu Phe Glu Cys Pro Met Ser Pro Ala Ser His Arg
100          105          110
Arg Ser Arg Ala Leu Ser Pro Ala Gly Tyr Thr Ser Pro Thr Arg Val
115          120          125
His Arg Asp Ser Val Ser Ser Val Ser Ser Phe Thr Ser Tyr Gln Asp
130          135          140
Ile Tyr Ser Arg Ala Arg Ser Arg Ser Arg Ser Arg Ala Leu His Ser
145          150          155          160
Ser Asp Arg His Asn Tyr Ser Ser Pro Pro Val Asn Ala Phe Pro Ser
165          170          175
Gln Pro Ser Ser Ala Asn Ser Ser Phe Thr Gly Cys Ser Ser Leu Gly
180          185          190
Tyr Ser Ser Ser Arg Asn Arg Ser Phe Ser Lys Ala Ser Gly Pro Thr
195          200          205
Gln Tyr Ile Phe His Glu Glu Asp Met Asn Phe Val Asp Ala Pro Thr
210          215          220
Ile Ser Arg Val Phe Asp Glu Lys Thr Met Tyr Arg Asn Phe Ser Ser
225          230          235          240
Pro Arg Gly Met Cys Leu Ile Ile Asn Asn Glu His Phe Glu Gln Met
245          250          255
Pro Thr Arg Asn Gly Thr Lys Ala Asp Lys Asp Asn Leu Thr Asn Leu
260          265          270
Phe Arg Cys Met Gly Tyr Thr Val Ile Cys Lys Asp Asn Leu Thr Gly
275          280          285
Arg Gly Met Leu Leu Thr Ile Arg Asp Phe Ala Lys His Glu Ser His
290          295          300
Gly Asp Ser Ala Ile Leu Val Ile Leu Ser His Gly Glu Glu Asn Val
305          310          315          320
Ile Ile Gly Val Asp Asp Ile Pro Ile Ser Thr His Glu Ile Tyr Asp
325          330          335
Leu Leu Asn Ala Ala Asn Ala Pro Arg Leu Ala Asn Lys Pro Lys Ile
340          345          350
Val Phe Val Gln Ala Cys Arg Gly Glu Arg Arg Asp Asn Gly Phe Pro

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79

B

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385	390	395
Gln Val Gln Gln Val Trp Arg Lys Lys Pro Ser Gln Ala Asp Ile Leu		
405	410	415
Ile Arg Tyr Ala Thr Thr Ala Gln Tyr Val Ser Trp Arg Asn Ser Ala		
420	425	430
Arg Gly Ser Trp Phe Ile Gln Ala Val Cys Glu Val Phe Ser Thr His		
435	440	445
Ala Lys Asp Met Asp Val Val Glu Leu Leu Thr Glu Val Asn Lys Lys		
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Val Ala Cys Gly Phe Gln Thr Ser Gln Gly Ser Asn Ile Leu Lys Gln		
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<213> Caenorhabditis briggsae

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<221> VARIANT

<222> 94, 95, 96, 120, 179, 318

<223> Xaa = Any Amino Acid

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Glu Arg Asp Asn Glu Lys Glu Ile Val Lys Ala Val Gln Arg Arg Gly	
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Asp Glu Ala Phe Asp Ala Phe Tyr Asp Ala Leu Arg Asp Thr Gly His	
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Asn Asp Leu Ala Asp Val Leu Met Pro Leu Ser Arg Pro Xaa Xaa Xaa	
85	90
Asn Pro Val Pro Met Glu Cys Pro Met Ser Pro Ser Ser His Arg Arg	
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115	120
Arg Asp Ser Ile Ser Ser Val Ser Ser Phe Thr Ser Thr Tyr Gln Asp	
130	135
Val Tyr Ser Arg Ala Arg Ser Ser Ser Arg Ser Ser Arg Pro Leu Gln	
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Ser Ser Asp Arg His Asn Tyr Met Ser Ala Ala Thr Ser Phe Pro Ser	
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Gln Pro Xaa Ser Ala Asn Ser Ser Phe Thr Gly Cys Ala Ser Leu Gly	
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 Pro Arg Gly Leu Cys Leu Ile Ile Asn Asn Glu His Phe Glu Gln Met
 245 250 255
 Pro Thr Arg Asn Gly Thr Lys Ala Asp Lys Asp Asn Leu Thr Asn Ile
 260 265 270
 Phe Arg Cys Met Gly Tyr Thr Val Ile Cys Lys Asp Asn Leu Thr Gly
 275 280 285
 Arg Glu Met Leu Ser Thr Ile Arg Ser Phe Gly Arg Asn Asp Met His
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 Gly Asp Ser Ala Ile Leu Val Ile Leu Ser His Gly Glu Xaa Asn Val
 305 310 315 320
 Ile Ile Gly Val Asp Asp Val Ser Val Asn Val His Glu Ile Tyr Asp
 325 330 335
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 340 345 350
 Val Phe Val Gln Ala Cys Arg Gly Glu Arg Arg Asp Asn Gly Phe Pro
 355 360 365
 Val Leu Asp Ser Val Asp Gly Val Pro Ser Leu Ile Arg Arg Gly Trp
 370 375 380
 Asp Asn Arg Asp Gly Pro Leu Phe Asn Phe Leu Gly Cys Val Arg Pro
 385 390 395 400
 Gln Val Gln Gln Val Trp Arg Lys Lys Pro Ser Gln Ala Asp Met Leu
 405 410 415
 Ile Ala Tyr Ala Thr Thr Ala Gln Tyr Val Ser Trp Arg Asn Ser Ala
 420 425 430
 Arg Gly Ser Trp Phe Ile Gln Ala Val Cys Glu Val Phe Ser Leu His
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 Ala Lys Asp Met Asp Val Val Glu Leu Leu Thr Glu Val Asn Lys Lys
 450 455 460
 Val Ala Cys Gly Phe Gln Thr Ser Gln Gly Ser Asn Ile Leu Lys Gln
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 <213> Caenorhabditis vulgaris

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 35 40 45
 Phe Tyr Asp Ala Leu Arg Ser Thr Gly His Glu Gly Leu Ala Glu Val
 50 55 60
 Leu Glu Pro Leu Ala Arg Ser Val Asp Ser Asn Ala Val Glu Phe Glu

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Cys	Pro	Met	Ser	Pro	Ala	Ser	His	Arg	Arg	Ser	Arg	Ala	Leu	Ser
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Ala	Gly	Tyr	Thr	Ser	Pro	Thr	Arg	Val	His	Arg	Asp	Ser	Val	Ser
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Val	Ser	Ser	Phe	Thr	Ser	Tyr	Gln	Asp	Ile	Tyr	Ser	Arg	Ser	Thr
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Ser	Ser	Ser	Arg	Pro	Leu	His	Thr	Ser	Asp	Arg	His	Asn	Tyr	Val
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				165					170					175
Ser	Lys	Ala	Ser	Ala	His	Ser	Gln	Tyr	Ile	His	Glu	Glu	Asp	Met
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Tyr	Val	Asp	Ala	Pro	Thr	Ile	His	Arg	Val	Phe	Asp	Glu	Lys	Thr
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225					230					235				Lys
Asp	Asn	Ile	Ser	Asn	Leu	Phe	Arg	Cys	Met	Gly	Tyr	Ile	Val	His
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Lys	Asp	Asn	Leu	Thr	Gly	Arg	Gly	Met	Met	Leu	Thr	Ile	Arg	Asp
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Ser	Trp	Arg	Asn	Ser	Ala	Arg	Gly	Ser	Trp	Phe	Ile	Gln	Ala	Val
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Glu	Val	Phe	Ser	Leu	His	Ala	Lys	Asp	Met	Asp	Val	Val	Glu	Leu
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*By
Anatol*

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<213> Caenorhabditis elegans

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1 5 10

84

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